Math 1

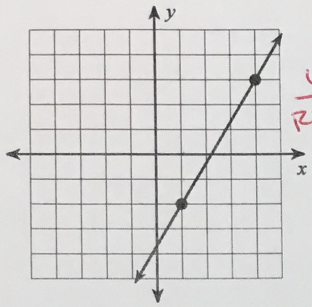
Name KEY

More With Slope - NOTES

Date _____

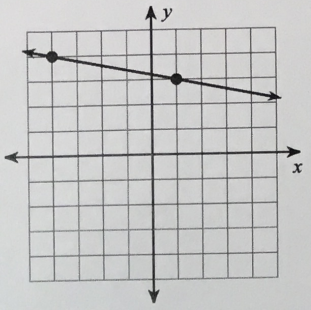
Find the slope of each line.

1)



UP 5 / RIGHT 3 = $\frac{5}{3}$

2)



$\frac{\text{DOWN } 1}{\text{RIGHT } 5} = -\frac{1}{5}$

3) Slope Formula:

$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{\Delta y}{\Delta x} = \frac{\text{THE HEIGHT DIFFERENCE}}{\text{THE LENGTH DIFFERENCE}}$$

Find the slope of the line through each pair of points.

4) $(-10, 1), (-2, -13)$ (x_1, y_1, x_2, y_2)

$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{-13 - 1}{-2 - -10} = \frac{-4}{8} = \boxed{-\frac{1}{2}}$$

5) $(-10, 10), (-1, 15)$ (x_1, y_1, x_2, y_2)

$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{15 - 10}{-1 - -10} = \boxed{\frac{5}{9}}$$

6) $(-1, 11), (14, -4)$ (x_1, y_1, x_2, y_2)

$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{-4 - 11}{14 - -1} = \frac{-15}{15} = \boxed{-1}$$

7) $(-5, -17), (19, 10)$ (x_1, y_1, x_2, y_2)

$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{10 - -17}{19 - -5} = \boxed{\frac{27}{34}}$$

8) $(2, 17), (-2, -15)$ (x_1, y_1, x_2, y_2)

$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{-15 - 17}{-2 - 2} = \frac{-32}{-4} = \frac{32}{4} = \boxed{8}$$

9) $(3, -3), (3, 8)$ (x_1, y_1, x_2, y_2)

$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{8 - -3}{3 - 3} = \frac{11}{0} = \boxed{\text{UNDEFINED}}$$